

**From:** Boyle, Ron <Ron.Boyle@aecom.com>  
**Sent:** Tuesday, January 11, 2011 5:38 PM  
**To:** Whelan, Joseph <JWhelan1@wm.com>  
**Cc:** Frey, Jesse <JFrey@wm.com>; Lottig, Justin <JLottig@wm.com>  
**Subject:** RE: Incident Alert and Follow Up on Today's DOH Inspection

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Hi Joe,

I just left you a voice message on your office phone. I did not assess items a) or b) for the north/western portion of E6 as this area was not available for inspection when I was at the site yesterday. It was my understanding that the primary concern and issue for me to address was the condition of the sideslope liner from falling rocks, which DOH does not mention at all in their e-mail below. I can be at the site first thing in the morning to address these issues, but I'm concerned that with the forecasted storm approaching it would not be wise to expose the northwestern leading edge of E6 to inspect the liner encapsulation and the leachate layer condition.

Regarding the drainage inlet no.1, GBI had mentioned yesterday that they would be digging this area out so that the entire inlet grate would be exposed and its my understanding that they finished this today. DOH also recommends that the area surrounding the inlet be excavated down to original design grade since it has filled in with silt/mud/rock. I agree with this recommendation as this will enlarge the capacity of this area for storage of mud and silt for future storms. DOH also recommends that measures be taken to reduce the susceptibility of the inlet to clog; I think one solution would be to slow any water coming down the canyon with a series of cross berms or dike across the canyon floor. I can discuss these measures with you tomorrow when I get out to the site.

Please call me on my cell phone if you have any questions.

**Ron Boyle, P.E.**  
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Please note: my e-mail has changed to [ron.boyle@aecom.com](mailto:ron.boyle@aecom.com) Please update your address books accordingly.

**Important Earth Tech News**

WMH002811

Earth Tech's parent company AECOM is evolving to better serve global clients. AECOM is forming **AECOM Environment** -- a new global business line that merges the environmental resources of ENSR, Earth Tech, STS and Metcalf & Eddy. With 4200 staff in 20 countries, AECOM Environment will be one of five new global business lines of AECOM (AECOM Water, AECOM Transportation, AECOM Design, AECOM Energy & Power). Though our name is changing, our commitment to the success of your projects and your organization remains strong. We will keep you apprised of future details.

*Please consider the environment before printing this page.*

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**From:** Whelan, Joseph [mailto:JWhelan1@wm.com]  
**Sent:** Tue 1/11/2011 4:51 PM  
**To:** Boyle, Ron  
**Cc:** Frey, Jesse; Lottig, Justin  
**Subject:** FW: Incident Alert and Follow Up on Today's DOH Inspection

Greetings.

Please review this "approval" letter to move back into cell 6. Please make sure that the email report you provided us earlier has language that addresses the liner on the north end of cell 6, as well as confer with GBI and reference the improvements made to the DI1 and any other conditions DOH lists below. Please try to complete this today, so that we can go back into the cell by Thursday. We should coordinate moving the boulders tomorrow. Thanks.

Joe

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**From:** Miyashiro, Thomas [mailto:thomas.miyashiro@doh.hawaii.gov]  
**Sent:** Tuesday, January 11, 2011 11:57 AM  
**To:** Lottig, Justin  
**Cc:** Ichinotsubo, Lene K; Ruiz, Jose A; Fujimoto, Janice K; Frey, Jesse; Whelan, Joseph  
**Subject:** RE: Incident Alert and Follow Up on Today's DOH Inspection

Hi Justin and Jesse: Per our discussion yesterday, Jan. 10, 2011, we understand that Ron Boyle was on site to inspect and assess cell E6 with regard to adequacy for returning E6 to operation, and that WMH will be issuing a report to DOH to assess the adequacy of E6 for return to operation.

We understand that the assessment will include, but not be necessarily limited to, the following:

- a. Condition of liner system, including the geomembrane encapsulating the GCL, the drainage, operations and select waste layers, with respect to the effects of the storm flows and falling rocks. We understand that this initial assessment will be for areas that will be placed into operation, and will not necessarily cover the entire lined area of E6. Areas not placed into operation will be assessed as resources and qualified personnel become available.
- b. The condition of the leachate collection system, particularly in the northern end of the lined area which may have been disturbed by the in-rushing storm water, and the possible infiltration of mud into the leachate collection and discharge riser piping in the sump area. We understand that the top of the discharge risers are still submerged and will probably not be exposed for some time.

In addition to restoring entrance to the 36-inch storm bypass pipe in cell E7 and adjacent ground level to plan

level requirements, can additional measures be taken to improve the drain pipe performance, i.e., reduce its susceptibility to clogging? The interior of the 36-inch pipe was reported to be clean. According to the construction plan, the inlet grating should be about 3 feet above the adjacent ground.

We understand that a report documenting the assessments by Ron Boyle and WMH that the portion of cell E6 where MSW is to be placed has been determined to be functional, in compliance with applicable specs and requirements, and will not cause a violation of environmental regulations, will be provided to DOH prior to resuming operation in that portion of cell E6. While we do not condone placing a waste cell in operation without a working leachate collection and discharge system, we understand under the present circumstances that your choices are very limited, and that extraordinary measures must be taken in the interest of maintaining public health and safety. We expect that assessments and statements of adequacy covering all aspects of the containment, leachate collection and discharge and storm water control systems for cell E6 will be provided prior to returning the entire lined portion of cell E6 to service.

Thanks.  
Tom

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**From:** Lottig, Justin [mailto:JLottig@wm.com]  
**Sent:** Thursday, December 30, 2010 3:20 PM  
**To:** Ichinotsubo, Lene K  
**Cc:** Fujimoto, Janice K; Whelan, Joseph; Frey, Jesse; Von Pein, Rick; Keener, Laura; Miyashiro, Thomas; Ruiz, Jose A  
**Subject:** Incident Alert and Follow Up on Today's DOH Inspection

Aloha Lene,

Today, Jose and Tom were at the site to inspect the progress of cell E6 repairs. Although I was not involved with today's inspection, I spoke with our Engineer, Jesse Frey, and he was. According to Jesse, Jose asked if we were going to submit an incident alert for the storm that happened late on 12/27/10. Our initial notification was to Jose and Tom verbally when they were at the site on 12/28. I've attached a copy of the follow-up.

During the inspection today, the DOH reminded Waste Management that the Emergency Action Plan (EAP) must be implemented per item 13.b.ii. This plan was implemented preceding and following both storms. The EAP requires that:

*Prior to a forecasted storm,*

- *WGSL personnel will inspect all drainage on-site structures to verify that they are in working order.*
- *Excessive silt in ditches and basins will be removed and the condition of pipes and discharge structures from basins will be verified.*
- *Diversion berms will be constructed around the current disposal area as needed to prevent run-on from entering the waste fill, and to prevent runoff from the waste fill areas of the site.*

- *Interim cover will be placed over exposed waste at the end of the working day prior to the forecasted beginning of a severe storm.*

All of these items were completed before and following both storms. Additionally, the EAP says that:

*A Severe Storm Inspection (Post-Hurricane / Severe Storm Forms [Appendix B]) will be conducted, if necessary, during any prolonged storm event to correct or repair any conditions that have been damaged or that may cause damage to on-site or off-site facilities. Excessive silt/sediment will be excavated out of the sedimentation basin and drainage channel/ditches as necessary.*

A severe storm form was completed for each storm on the days following each respective storm. Those forms are attached. On the day following the storm on December 20, WM took the extra step of having a certified engineer complete the inspection, although this was not required by the plan or the permit. Site management completed the form on December 28.

It is unclear to me where there is a requirement to use a certified engineer to complete the inspection. According to permit condition 13.c:

*If the acceptance and disposal of waste ceases, the permittee(s) shall submit a written evaluation of whether waste acceptance can resume. The evaluation shall be prepared by a professional engineer registered in the State of Hawaii and the Site Manager, certifying that the landfill and its associated environmental controls are functional, equivalent, or better than required, and that operation of the landfill will not cause a violation of environmental regulations.*

However, waste acceptance and disposal was reduced, but it did not cease on any of the affected days.

Please let me know if you have any other questions. Thank you.

<<WGSL Severe Storm Damage Report\_122010.pdf>> <<Incident Alert Form Follow up 123010.pdf>>  
<<WGSL Severe Storm Damage Report\_122810.pdf>>

Justin H. Lottig

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